231
133 the young reindeer are processed for leather and as wild leather (chamois leather) are a product in demand for export.

## Hunting

224 The valuable fur-bearing animals, once so numerous, have almost completely disappeared from the settled areas and have withdrawn into the inaccessible wastelands. And, nevertheless, the Far Eastern region with its vast, wild forests is still, even today, a grateful empire of hunters. Approximately a third of the furs acquired in the Soviet Union are won in the Far East. Transbaykal is not so active in this. Squirrels and foxes provide the bulk of the skins ; the sable has been completely exterminated in wide stretches of land and is now only rarely encountered. In the tundra region the Polar fox is the most important animal hunted. /133/ The number of large wild animals has also been heavily decimated by the earlier rapacious hunting. The spotted stag /Fleckenhirsch/, sought because of its "Panten" /unhardened antlers/ and formerly very numerous in the Amur and Ussuri region, occurs now only very rarely in the open hunting ground and is kept today only in animal parks in the Sikhote-Alin'; of these seven are known with several thousand stags. For the protection of the plant and animal world rather large areas in the Sikhote-Alin', on Kamchatka, and on Lake Baykal have been declared nature protection areas.

Hunting for fur-bearing animals is organized by the state and is done from numerous "bases, " where the hunter receives not only his hunting equipment but also other necessities of life, and then goes out to hunt in cadres. In their hunting, these state hunters have to follow fixed instructions, varying from place to place, for the sparing and preservation of the wild life. At the end of the hunting period the skins are delivered to the bases, and the hunter is paid according to his output.

## Fishing and Hunting of Sea Animals

226 In Transbaykal, which lies inland, fishing has only a subordinate role. Apart from small lakes, which are, however, rich in fish, the fishing practised professionally is concentrated on Lake Baykal. Its outstanding fish is the omul (Coregonus omul Pall.), a type of salmon, [255] whose spawn is bred and set out. Some fish canning factories in various localities on the coast process the catch not used locally. Not insignicant

228 The total catch from sea fishing in the USSR in 1938 was 1,490,000 tons, of which the Far East contributed 25.2 percent, followed by the Volga-Caspian area with 23 percent. A total catch of 2.2 million tons was planned for 1950. On the whole it was filled only by 96 percent, while the Far East overfilled its quota by 50 percent. Accordingly the Far East's percentage of the total catch of the Soviet Union has grown still more. More exact figures on the individual regions have not been published. A total catch of 3,476,000 tons is planned for 1955 for the Soviet Russian sea fishing industry.

In evaluating the catch of the various areas, however, it must be taken into consideration that in the Far East especially valuable types of salmon constitute the bulk of the catch. Furthermore it should be brought up that because of its small population and therefore its own low requirements, the Far East belongs to the most important surplus area. As a consequence of this development an active fish industry has come into being here. All the larger places on the coast
● [255] have cold-storage houses. However, there has been a special rise in fish canning factories, whose number has risen from 2 in 1913 to 42 in 1938. At the same time in connection with these, factory installations have been created which produce on the spot the necessary requirement of cans. In addition there are special ships which process the catch right on board. In this connection the ships for catching crabs/shrimp should be mentioned; these ships can be described as floating canning factories. Their work area is the /135/ west coast of Kamchakta. In catch of crabs/shrimp the Far Eastern region has first place in the world.

The coastal area on the Sea of Japan from the Korean border to the Tatar Strait constitutes the most southerly fishing district. Here herring and sardine fishing stand in the foreground. Fishing is done above all in the bays, with the richest catches coming from the Bay of Peter the Great. The center of this and the processing point is Vladivostok, which has a modernly equipped canning industry. In the years before 1938 the catch of herring went in part to the interior and in part to Japan.

The area around the lower course of the Amur constitutes the second fishing district. This great river serves as preferred spawning ground especially for two of the Pacific types of salmon: the beloved Keta salmon (Oncorhynchus Keta Walb), which provides red caviar and is called dog salmon by the Americans; and the somewhat smaller gorbusha (humpback salmon, Oncorhunchus gorbusha Walb). There

339 factories newly created in Komsomolsk, Khabarovsk, and Londoko in Birobidzhan shows. The last-named cement plant has very recently been expanded into the largest such plant in the Far Eastern region next to the plant at Spassk. For the supplying of Transbaykal a cement plant has been newly erected in Temlyuy, 98 kilometers west of Ulan-Ude.

288 In light industry, a new cloth factory in Ulan-Ude is worth mentioning. It was moved here in 1941 and since then it has been so greatly expanded that it delivers several million meters of cloth a year. It is the first cloth factory in the Far Eastern regions. In Birobidzhan there is an important plant in the clothing and knitting goods industry; Khabarovsk and Vladivostok have additional large undertakings in the manufacture of ready-made clothing. In the fu
295 goods and leather industry there are two outstanding central points t be mentioned, both of which are in Transbaykal: Chita with the largest fur and leather works in the Far Eastern regions; and Chikoyskiy Zavod, which lies east of Kyakhta on the river of the same name, which draws its raw materials from the Mongolian People's Republic. The production of Chita alone is sufficient to supply all of east Siberia with furs and leather. Shoe and other leather goods factories exist in various places. The shoe factories produce approximately 3 million
323 pairs a year. Only one plant--although, to be sure, one of large dimensions--is available to supply a large part of the Far Eastern regions with glass, glass goods, crockery, and porcelain. This plant lies in Ulan-Ude and represents the largest glass and glass goods factory in Siberia. In addition to window and mirror glass, it also supplies special glass for special purposes. According to the projected capacity it is supposed to be in a position to deliver 14,000 tons of plate glass and 6,000 tons of mirror glass. Ulan-Ude is responsible for supplying all of east Siberia with glass. Mention has already been made of the glass factory in Magadan. A smaller factory is supposed to still exist in the Vladivostok area.

256 The food and luxuries industry is represented by numerous small plants in the agricultural regions. Khabarovsk, Svobodnyy, and Blagoveshchensk have large mills. The first two have a processing capacity of 200 tons of grain per day; the Blagoveshchensk mill is supposed to be even bigger. The large bread and other baked goods plants, which are typical of Soviet cities, are also to be encountered here.
• 255 Khabarovsk has the most important installations of this type. The surplus of meat produced in Transbaykal are processed into preserved products and canned goods in the two meat plants in Ulan-Ude and in Chita.

133

(Captions to Map on page 235)

1. Baykal Daur
2. Nerchinsk Daur
3. Vitim Plateau and the northern mountain forest provinces
4. Olekma mountain country and the Olekminsk Stanovik
5. Oldoy-Zeya mountain country
6. Zeya-Bureya plain
7. Bureya mountain country
8. Amur plain
9. Sikhote-Alin'
10. Ussuri-Khanka depression
11. Sakhalin Island
12. Area of the Amgun and the Uda
13. Okhotsk coastal area
14. Provinces of the extreme northeast
15. Kamchatka Peninsula

responsible for 32 percent. On the Transbaykal side, in the area of 228
the Buryat-Mongol ASSR, approximately 30,000 double centner of
fish are caught annually; in good years even more than 35,000 double
centners of fish are caught. Thus a series of fishing settlements animate
the Transbaykal shore. The most important are Nizhne-Angarsk, 361
which lies on the extreme north east tip, Ust'-Barguzin at the mouth [255] •
of the river of the same name, where there is also a fish canning
factory, and, south of this, Goryachinsk, which in addition to fishing [312]
is acquiring a growing importance as a health resort because of its hot
springs.

## Baykal Daur

Baykal Daur begins in the west with the Khamar-Daban. This 133
mighty mountain massif, projecting up to 2,217 meters, follows the
southern shore of Lake Baykal. Along this shore, runs the railroad
which encircles Lake Baykal and which is forced to follow all its
windings. This mountain massif is little divided and has predominantly
soft forms with dome-like heights which are seldom rocky. These
heights, as Prassolov describes them (160), give the impression of being

160. Prassolov, L.I. Iuzhnoe Zabaykaliye /Southern

361 The city of Vladivostok itself is very narrow in the overall installation. It encloses the "Golden Horn" and also stretches along Amur Bay. A section of the city also lies on the northern end of Russkiy Island opposite the entrance into the "Golden Horn." The hills rising quickly from the coast give an almost southern appearance to the view of the city with its rows of houses rising on the slopes. The main streets as a rule run parallel to the coast. The secondary streets are often so steep that they can be traveled only with difficulty. In contrast to the narrowness of the city and the tasteless apartment houses and business houses crowding the city, the varied, green surroundings, which are decorated by numerous, beautifully situated summer houses, appear especially pleasant. Russians constitute the [162] overwhelming majority of the population, but the percentage of Chinese and Koreans is very significant. In 1926 there were 23,400 Chinese, 7,000 Koreans, and 600 Japanese in a total population of 107,000. The Chinese as a rule are unmarried and work by preference as harbor workers.

361 Vladivostok is not only a harbor city, but it also has developed [255] into an industrial city. In first place here is the fish industry, which, however, is not concentrated solely in the city but rather is distributed over many localities in the immediate and more distant environs of the city. The fish industry is occupied predominantly with the canning of fish and crabs. Numerous fishing collection points along the entire southern coast supply the material. The most important localities lie on bays or on islands. The most important places are Nakhodka, where a railroad line from Suchan ends, Sarubino, and the islands of Popova, Reineke, and Putyatin. In second place is the wood industry, [322] which processes valuable deciduous trees and supplied wood products such as matches, veneer sheets, and furniture. In addition, the city also has flour and rice mills, leather factories and soap boilers. [396] Vladivostok has great importance as a naval harbor and a shipyard, [399] especially for naval ships. There is in addition a plant for constructing airplanes. An oil refinery supplements the entire industrial and [382] transportation economy. Among the numerous scientific institutions in Vladivostok, the branch office of the Academy of Sciences is [815] especially prominent. It has an important share in the exploration of the Far East.

361 Apart from this fish industry, which is distributed among 322 numerous localities along the coast, the area around Vladivostok is also rather richly equipped with other industrial installations. Among

almost never penetrates into the land, however. 000

The area occupied by settlements is very slight in the east and 361
in the center of the depression. In the west, on the other hand, there 563
are a series of villages on the Anadyr' and its tributaries. Among these, Markovo with its approximately 500 inhabitants has first rank. Russians, too, live in the villages, but otherwise the population is mostly sedentary Koryak, who pursue fishing and the breeding of dogs. In the peripheral regions Chukchee wander more in the north as nomadic reindeer breeders, Koryak wander in the south, and Laumut and other Tungus in the west. Alternation between the excellent mountain tundra in the protected depressions in the winter forms the basis of their life. In large part, these people are still fully nomadic. However, everywhere among them the effort is being maintained to create fixed, permanent winter quarters; and thus with many of these tribes, especially with the Koryak, a transition to semi-nomadism can be determined. Collectivization also has not stopped at these peoples. In 1948 there were in the Koryak National Okrug 40 livestock-breeding kolkhoz (reindeer), in some of which slight quantities of potatoes and vegetables were cultivated. At 70 points along the coast the Koryak have been brought together into fishing collectives.

There are only a few settlements on the coast because of its 361
flat relief offering little protection from the storms. However, the locality of Anadyr', which has almost 2,000 inhabitants and lies at the mouth of the river of the same name, assumes a central position here. This town forms the entrance gate to the entire Anadyr' region [505]
and is regularly visited by coastal steamers. A short while ago rather [135]
large Eocene brown coal fields were found in the vicinity of the locality. The main deposit stretches opposite Anadyr' on the northern side of the mouth of the Anadyr' from the point where the Ugol'naya flows into the foot of the Zoloty Mountain Range. On both sides of the mouth of the Ugol'naya appear two seams, which have a thickness of 1.5 meters and 5.8 meters. Mining is already underway here /294/ and supplies the coastal steamers. In addition, Anadyr' is the central [255]
station of state fishing on the entire northern coast; here the catch of the individual fish collection points are delivered and processed in an important canning factory.

Toward the southwest the Anadyr' depression goes over into the 133
Penzhina lowland, the two being separated only by a gently rolling watershed which is up to 331 meters high. The Penzhina lowland, however, is far smaller in size, and is drained by the Penzhina which

into being. However, a significant part of the immigration has been also for the benefit of agriculture, which, according to all reports, has made extraordinary progress. Thus, Kamchatka, which earlier had to have the bulk of its food supplied from outside, already gets along in large part with its own production, and the goal of autarchy in terms of food will probably soon be reached.

In the southern part of the peninsula, which has a mild climate, the breeding of cattle has attained a great and continually growing significance. The climatic conditions here are approximately the same as those of Sweden. The number of cattle had already reached several thousand head by 1939. A series of livestock sovkhoz have taken over the job of supplying milk and meat to the localities engaged in the fishing industry. In the Kamchatka valley and in the environs of Petropavlovsk agriculture, too, has made a start. The area under cultivation increases from year to year. In sovkhoz and kolkhoz grain, potatoes, and vegetables are cultivated with success. Fruit /301/ trees were introduced, and today are already yielding their own apples. A series of agricultural experimental stations in the interior and also in the coastal regions are to prepare the further development of agriculture and the breeding of livestock.

Of greatest importance for the economy of Kamchatka is fishing and the catching of sea animals. In this respect Kamchatka is the most important area in the Far East, and it is especially prominent because of the appearance of highly valuable types of salmon. The west coast has the principal role in the catching of salmon and crabs. On the east coast the area around the mouth of the Kamchatka is a pronounced salmon region, while Petropavlovsk constitutes the center of the catching of sea animals. From passive, rapacious catching of fish in immovable, built-in traps--the so-called "fish dams," which blocked the river--a transition has been made to catching the fish in sweep nets and drag nets. Thus the fish are now not caught at the mouths of the rivers alone but also in the sea. The earlier, primitive covering of the mounds of caught fish with salt, a practice which was customary on the entire coast of the Far East and under which great quantities of fish spoiled, has given way to smoking of the fish and salting of the fish in vats and above all to processing in canning factories. Modern fishing steamers with processing equipment on board have contributed to making Kamchatka today the second fish-catching region in the Soviet Union, second only to the Caspian Sea. In the catching of crabs Kamchatka even is in first place in the

world. The crabs are extraordinarily large and attain lengths of half a meter and more. They are drawn up from the bottom of the sea in drag nets in which they get entangled. Worthy of mention in this connection are the floating crab canning factories, which are used on the west coast and which carry out on board all the work from catching to canning.

The capital of the peninsula is Petropavlovsk. The city lies on Avacha Bay, which freezes over only exceptionally. The bay is surrounded in a semi-circle by the panorama of high volcanos. The city's favorable natural harbor, which a short while ago got a ship-yard with a dock for ships of up to 5,000 gross registered tons, gains more and more in importance since the ships of the Northern Sea Route spend the winter here before they start out on their trip to the north. This applies especially to ships which regularly travel to the Kolyma River in order to ensure supplies of heavy materials to the gold regions on the upper course of the Kolyma. Petropavlovsk is the center of the hunting of sea animals and of the industries connected with this. In addition, the city also has fish processing installations, a brickyard, saw mills, and a can factory, which is of especial importance since it supplies the necessary material to all the smaller fish processing localities. In the treeless delta of the Kamchatka River lies Ust'-Kamchatsk, the next most important locality on the peninsula. More than 2,000 workers /302/ work in the canning factories there in the summer. The locality, in addition, has a special importance as the gateway to the interior of the peninsula, which can be reached easily only through the Kamchatka valley, while the other approaches have to overcome difficult passes. In increasing measure also wood is floated down the Kamchatka River to the coast, where it is processed in and sent on from Ust'-Kamchatka. In the broad longitudinal valley of the Kamchatka there are a series of villages, among which Verkhne Kamchatsk and Mil'kovo should be mentioned. In this area removed from the coast, horses are kept, since supplying fish food for dogs causes difficulties. At the inner entrance to the cross valley, at the foot of the largest volcano cone, lies the village of Klyuchi, from which the volcano receives its name. Here the traffic lines from the interior merge and make the locality into a central trading place, especially for fur goods. In addition to Russians and Koryak, some Chinese and Koreans have also settled here. Klyuchi has a scientific observatory for the study and special observation of the Klyuchevskaya Sopka. Below the village the Kamchatka widens into a sea decorated with islands.